



# PATENT SPECIFICATION <sup>(21)</sup> 3 5,181 /71

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		Accompanied by a Provisional Specification
Complete Specification entitled	(54)	IMPROVEMENT IN CONNECTIONS FOR VALVES, PIPE FITTINGS, PUMPS AND ASSOCIATED DEVICES
Lodged	(23)	29th October, 1971
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Related Art	(56)	403490      (64210/65)      74.5, 86.3

The following statement is a full description of this invention, including the best method of performing it known to me:

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*This invention discloses a means of effecting a considerable reduction in the number of valves, pipe fittings, pipes, pumps and associated devices having screw threads or other connections which need to be held in stock or for which manufacturing dies, moulds, patterns, cores or other equipment are needed and a similar reduction is possible. To those skilled in the art it will be apparent that this invention particularly lends itself to those articles made of plastics and having screw threads for pipes more particularly of the male type but the investors do not limit its use to the above as it can be applied to metal or other articles and to female threads or a combination of male and female threads or male and female sockets or other connections.*

*The basis of the invention is the following:*  
*If for example a pipe tee piece of size 1½" is manufactured the side outlet may be used for example to take off pipe down to ¾" so that (1½" x 1½" x 1½") (1½" x 1½" x 1½") (1½" x 1½" x 1") (1½" x 1½" x ¾") sizes would be necessary and also the manufacturing equipment. Now if we fit for example an extended side outlet having decreases in sizes of male threads (only for example) in steps 1½"/1½"/1"/¾", the warehouse or final user can with ease (particularly in the case of plastic articles) cut off with for example a hand hacksaw, those sizes not required. Due to the very high cost of plastic dies, the importance of this invention cannot be overestimated. It can be readily applied to other articles mentioned and all closed fluid and liquid conveying systems, including foot valves and welded connections.*

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For the purposes of illustration Figure A indicates a typical footvalve 1 with stepped male thread connections 2 (one example only) and Figure B a tee piece 1 with stepped male thread connections on all three branches (another example only). The steps need only be on one or two branches and of different numbers of steps and of different combinations of fitting types as previously above discussed and many more valves, pipe fittings or pump connections are possible.

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THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

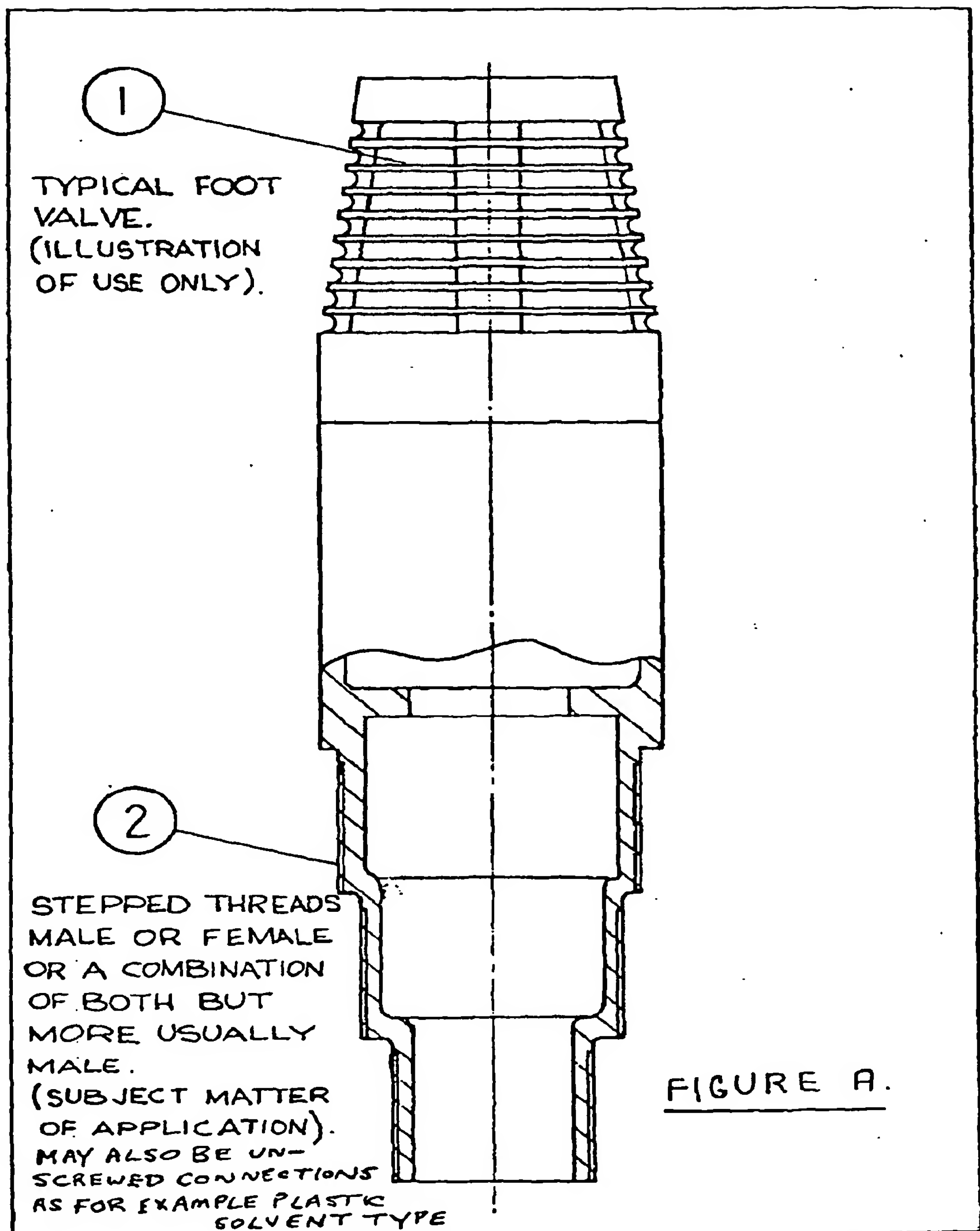
1.           A means for reducing the inventory or stock from manufacture to final use of valves, pipe fittings, pumps and associated devices (for example piping).
2.           A means for reducing the number and value of dies, moulds, patterns, cores or other equipment necessary for the manufacture of such devices.
3.           A means for the physical size and weight reduction as generally outlined in Claim 1, but a vital factor in remote areas with limited carrying facilities to meet an unknown size repair job on location.
4.           A means for the avoidance of a large proportion of returns to suppliers with consequent savings by both the supplier and the purchaser. Such returns are usually caused by over purchase of several sizes to make sure the correct size is available for a job, or error in either purchase or supply. The ready adjustment of the invention to the desired size obviates this.

Dated this 27th day of October, 1971

JOHN BRIAN O'HAIR AND ALSO DAPHNE LORRAINE O'HAIR



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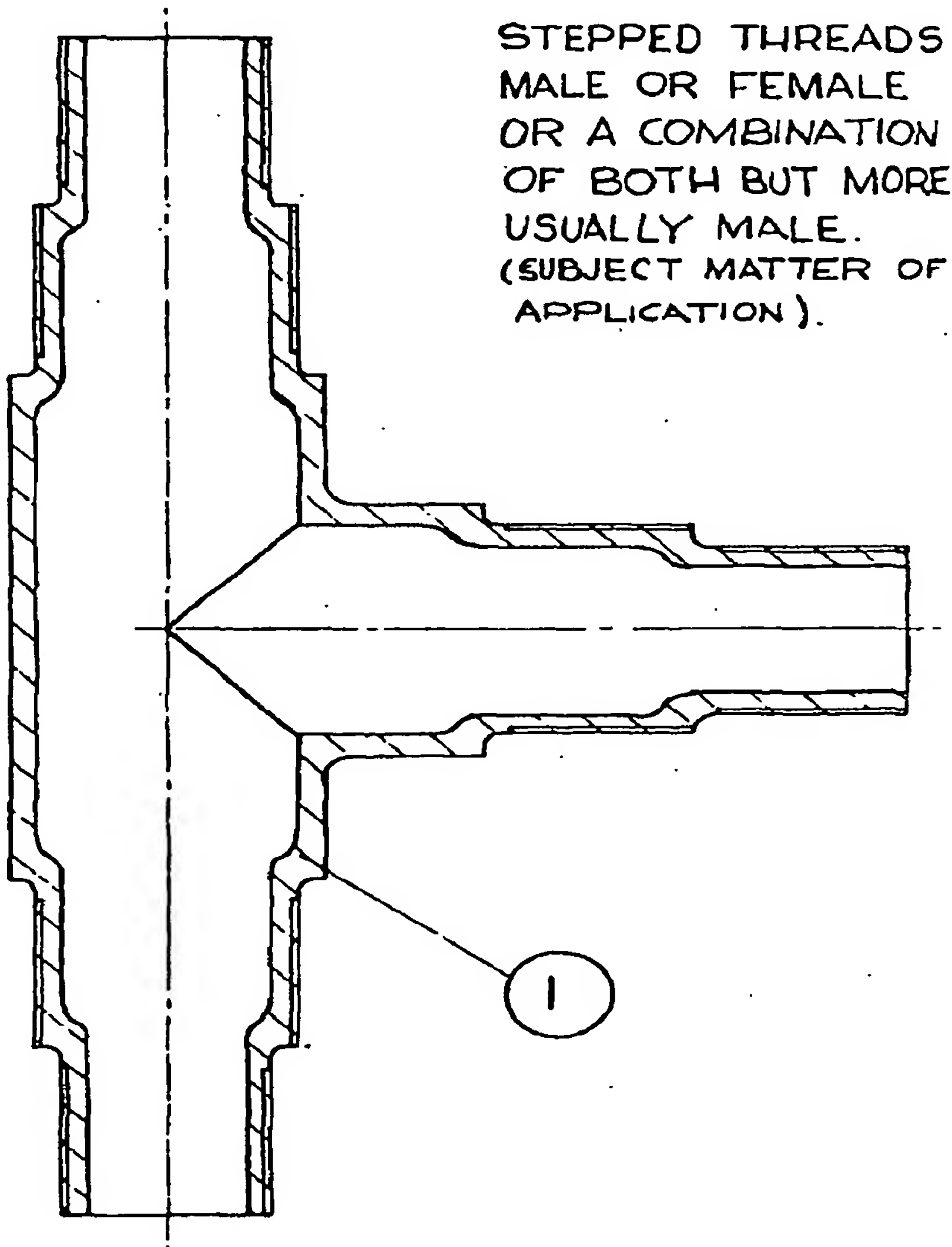


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STEPPED THREADS  
MALE OR FEMALE  
OR A COMBINATION  
OF BOTH BUT MORE  
USUALLY MALE.  
(SUBJECT MATTER OF  
APPLICATION).

FIGURE B.

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